

### Remarks

This communication is responsive to the Non-Final Office Action of **December 21, 2009**. Reexamination and reconsideration of the amended claims is respectfully requested.

### Status of Claims

Claims pending for examination: 1-42  
Claims previously canceled: 6  
Claims previously withdrawn: 9-37  
Claims in independent form: 1, 38, 40, 41, and 42

### Summary of The Office Action

**Claims 1, 38 and 40-42** were rejected under 35 USC §112, second paragraph, as purportedly being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 1, 38 and 40-42** were rejected under 35 USC §112, first paragraph, as purportedly failing to comply with the enablement requirement.

**Claims 1-8 and 38-41** were rejected under 35 USC §103(a) as purportedly being unpatentable over WO 00/69333 (Everett) in view of non-patent literature de Boer Johannes (de Boer).

## **Response**

### **35 USC §112, Second Paragraph**

**Claims 1, 38 and 40-42** were rejected under 35 USC §112, second paragraph, as purportedly being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention. The rejection is based on the faulty legal position that "Applicant's amendment to the specifications dated 01/28/09 does **raise a new issue.**"

### **"New Issue" is not a basis for a 35 USC §112, Second Paragraph Rejection**

The Examiner insists that the embodiment "where the reference arm is absent polarization adjusting components" raises a new issue. "Raising a new issue" is not a legal basis for a 35 USC §112, second paragraph rejection. Applicant respectfully requests a citation to the portion of the MPEP that declares that "raising a new issue" is a legal basis for a 35 USC §112, second paragraph rejection.

### **An Originally Filed Claim Is Not A "New Issue" Because**

#### **The Claims As Filed In Original Specification Are Part Of The Disclosure**

Even if "raising a new issue" was a sound legal basis for a 35 USC §112, second paragraph rejection (which it is not), the Examiner is also factually wrong concerning a new issue being raised. Claim 6 as originally filed read:

6. The system of claim 1, wherein the reference arm is absent polarization adjusting components.

Clearly the application as originally filed included an embodiment where the polarization adjusting components were not in the reference arm. An application can

have more than one embodiment. The Applicant also invites the Examiner to read Section 2163.06 of the MPEP, which recites:

**The claims as filed in the original specification are part of the disclosure.**

The claims as filed are part of the disclosure. The claims as filed included the embodiment "where the reference arm is absent polarization adjusting components". Therefore the limitation "where the reference arm is absent polarization adjusting components" is not a "new issue", whatever a "new issue" is. Figure one as originally filed also clearly illustrates the embodiment where the reference arm is absent addressable polarization selecting components.

### **35 USC §112, First Paragraph**

**Claims 1, 38 and 40-42** were rejected under 35 USC §112, first paragraph, as purportedly failing to comply with the enablement requirement. The Examiner asserts that "the claim(s) contain subject which was not described in the specification..." and that "Applicant's amendment to the specifications dated 01/28/09 does raise a new issue."

### **Applicant Can Amend The Specification With Originally Filed Claims**

The Applicant invites the Examiner to read Section 2163.06 of the MPEP, which recites:

If an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter. *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985).

The 01/28/09 amendment to the specification read:

Please amend the last paragraph on page 6, lines 26-29, as provided below:

~~Fiber polarization adjustors (paddles) 14a, 15a in both the sample and reference arms 14, 15 may be used to maximize the light power incident upon the sample 20 and the optimum interference of sample and reference arm light, respectively. However, measurement of retardation and fast axis does not depend upon ideal alignment of paddles.~~

Today's amendment reads:

In one embodiment, fiber polarization adjustors (paddles) 14a, 15a may be used in both the sample and reference arms 14, 15. In another embodiment, (as recited in

originally filed claim 6 and illustrated in originally filed Figure One), the reference arm 15 is absent polarization adjusting components 14a and 15a.

As controlled by the MPEP, Applicant clearly has the right to make this amendment because both the originally filed claim 6 and the originally filed figure one describe the embodiment where the reference arm does not have a polarization adjusting component.

### **Moving Material From Dependent Claim to Independent Claim Does Not Create A "New Issue"**

Claim 6 as originally filed was rejected in the 4/24/09 Office Action. To reject the claim, the Examiner must have searched for art pertinent to the claim. Therefore, it is illogical to assert that moving the limitation from claim 6 to claim 1, from which claim 6 depended, can raise a new issue.

### **"May" Does Not Equal "Must"**

#### **Should Not Read Limitations From Specification Into Claims**

The Advisory Action of September 2, 2009 stated that the amendment to the specification dated 1/28/09 raised a new matter issue because the originally filed specification describes that the adjustor paddles 14a and 15a **may** be used in both the sample arm 14 and reference arm 15. The Examiner appears to have confused "may" with "must". The Examiner also appears to have impermissibly read a limitation from the specification into a claim.

Claim 6 recited that the reference arm is absent polarization adjusting components. Additionally, the originally filed figure one illustrates an embodiment where the reference arm does not have a polarization component. An application can clearly have more than one embodiment. Today's amendment makes clear that in one

embodiment the reference arm does not have polarization adjusting components. This is completely consistent with the originally filed claims and figures.

While the specification may have originally illustrated different embodiments, and while the claims may have originally included different embodiments, both the figures as originally filed and claim 6 as originally filed make clear that there were alternative embodiments, including the embodiment where there are no polarization adjusting devices in the reference arm. The RCE and preliminary amendment were intended to focus on the embodiment where the polarization adjusting device resides in the sample arm. The Examiner has ignored the intent and substance of the RCE and the preliminary amendment in making unfounded 112 rejections. Applicant respectfully requests that these legally incorrect and factually incorrect rejections be withdrawn.

The MPEP and the case law are unambiguous in their guidance that limitations from the specification not be read into a claim. The Examiner has violated this guidance by misconstruing "may" to mean "must", and then inserting "must" into a claim.

"Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, **a particular embodiment appearing in the written description may not be read into a claim** when the claim language is broader than the embodiment." *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). (emphasis added)

In *Liebel-Flarsheim Co. v. Medrad Inc.*, 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004) the Federal Circuit discussed recent cases where **the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.** (emphasis added)

### **Proper Standard for 35 USC 112, First Paragraph Rejection**

Instead of inventing a "new issue" standard for a 112 rejection, the Examiner should comply with the section of the MPEP, which states:

The first paragraph of 35 U.S.C. 112 requires that the "specification shall contain a written description of the invention \* \* \*." This requirement is separate and distinct from the enablement requirement. See, e.g., *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1560, 19 USPQ2d 1111, 1114 (Fed. Cir. 1991).

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003).

This application clearly satisfies the actual standard because one skilled in the art could reasonably conclude that the inventor was in possession of the invention.

### **Does "New Issue" Refer To "New Matter"?**

The Office Action repeatedly refers to "New Issue". Perhaps the Examiner meant to make a rejection for "new matter". Even if this was the case, the Office Action is still wrong. The MPEP provides guidelines for this type of rejection. Clearly the previous amendment did not add any new matter to the specification, because it only deleted some text. Today's amendment also clearly does not add any new matter to the specification, because the matter appeared in the originally filed claims and figures and the MPEP explicitly gives the applicant the right to amend the specification. Applicant hereby provides the relevant section of the MPEP to the Examiner so that the Examiner can properly evaluate the purported new matter and finally conclude that no new matter has been added. Section 2163.06 of the MPEP recites:

**The claims as filed in the original specification are part of the disclosure.**

## **The Claims Patentably Distinguish Over the References of Record**

### **35 U.S.C. §103**

**Claims 1-8 and 38-41** were rejected under 35 USC §103(a) as purportedly being unpatentable over Everett in view of de Boer.

The Office Action admits that Everett does not disclose that the polarizer is in the sample arm. This admission is irrelevant to the missing limitation. The admission is also internally inconsistent because the Office Action asserts that Everett teaches “wherein the sample arm includes a polarizer.” Regardless of the internal inconsistency, whether there is a polarizer in the sample arm is irrelevant to the claim limitation that reads “where the reference arm is absent addressable polarization selecting components”. The Office Action should admit that Everett does not teach an apparatus where the reference arm is absent addressable polarization adjusting components.

The Office Action relies on de Boers to remedy the incorrect deficiency identified by the Examiner. Even so, the deficiency is not remedied. The Office Action states that de Boer “teaches the use of a PS-OCT interferometer ... that illustrates the use of a polarizer in the sample arm.” This statement is irrelevant to the missing limitation.

It doesn't matter whether de Boers teaches a polarizer in the sample arm. The claim limitation reads “where the reference arm is absent addressable polarization selecting components”. So rather than looking in the sample arm for what is there, the Examiner should be looking in the reference arm for what isn't there.

If the Examiner is asserting that “the polarizer” in the sample arm is the quarter wave plate (QWP), then the Examiner is still wrong because both the sample arm and the reference arm contain a QWP. The claim limitation concerns the reference arm not having an addressable polarization component. Applicant respectfully requests confirmation that the Examiner considers the QWP to be the polarizer and that de Boers shows a QWP in both the sample arm and the reference arm.



To establish a prima facie case of 35 U.S.C. §103 obviousness, basic criteria must be met. The prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.(A) Section 2131 of the MPEP recites how "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). This same standard applies to 103 rejections as evidenced by Section 2143(A) of the MPEP, which reads: "The rationale to support a conclusion that the claim would have been obvious is that **all the claimed elements** were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions".

When establishing a prima facie case of obviousness the Office must clearly articulate the reason(s) the claimed invention would have been obvious. MPEP 2142 recites that:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 418, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

Here, the criteria for establishing a prima facie case of obviousness are not satisfied since the combination of references does not teach or suggest all the claim limitations. None of the references, alone and/or in combination, teach "where the reference arm is absent addressable polarization selecting components." Both Everett

and de Boers show a wave plate in the reference arm. Thus, none of the claims are obvious for at least this reason.

The claims recite, “where the reference arm is absent addressable polarization selecting components.” Neither Everett nor Boer teach or suggest this claim limitation. Examination of Everett shows that Everett teaches, “the wave plate 16 makes the polarization state adjustable. Any polarization state can be used: circularly polarized, elliptically polarized, or linearly polarized.” (Everett page 8 lines 27-29; figure 1, element 16). One of ordinary skill in the art would appreciate that Everett teaches using an addressable polarization selecting component in the reference arm since the wave plate taught by Everett “makes the polarization state adjustable.” Thus, Everett teaches the use of addressable polarization selecting components in the reference arm.

De Boer does not remedy the shortcomings of Everett. Instead, de Boer also shows a QWP in both the sample arm and the reference arm. Thus, the combination of Everett and Boer does not teach or suggest “where the reference arm is absent polarization adjusting components.” Therefore, the Office Action has not presented a prima facie case of obviousness. Accordingly, the claims are allowable.

### **Non-Addressable Polarization Controllers Are Not Addressable Polarization Controllers**

Non-addressable polarization controllers are commonly placed in the arms of an interferometer for non-polarization sensitive imaging. These non-addressable controllers are aligned to maximize polarization overlap and to reduce polarization fade in a standard imaging configuration. This is distinctly different from the use of an addressable polarization controller that is used to step the relative polarization states in a deterministic and controlled fashion for quantitative polarization-sensitive imaging. Polarization controllers in general use for polarization balance – typically fiber loops as the representation in the figures– are not suitable for addressing polarization states because the loops do not cover points in polarization space (e.g., the Poincare sphere)

in systematic, formulaic, or addressable fashion. While the phrase "polarization controller" is open to interpretation it is quite clear that there is an important difference between a loop polarizer used to balance an interferometer and an "addressable" polarization controller.

Application No.: 10/055,282  
Filing Date: 01/22/2002  
Attorney Docket No.: 2001-0575


Applicant(s): ROTH et al.  
Examiner: JOHN F. RAMIREZ  
Art Unit: 3737

### Conclusion

For the reasons set forth above, the claims are now in condition for allowance.  
An early allowance of the claims is earnestly solicited.

Respectfully submitted,

Date: March 22, 2010

  
\_\_\_\_\_  
John T. Kalnay (Reg. No. 46,816)  
(216) 308-3245

KRAGULJAC & KALNAY, LLC  
4700 Rockside Road  
Summit One, Suite 510  
Independence, OH 44131